Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method comprising the step of sintering a mixture comprising a source compound for yttrium, a source compound for aluminum, and aluminum nitride to produce a sintered body of yttrium-aluminum garnet.

2. (Original) The method of claim 1, wherein said source compound for yttrium comprises yttria and said source compound for aluminum comprises alumina.

3. (Original) The method of claim 1, wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.59 to 0.62 contained in said source compound for yttrium and said source compound for aluminum.

4. (Original) The method of claim 1, wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.59 to 0.62 contained in said source compound for yttrium, said source compound for aluminum and aluminum nitride.

5. (Original) The method of claim 1, wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.61 to 0.63 contained in said source compound for yttrium and said source compound for aluminum, and wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.59 to 0.62 contained in said source compound for yttrium, said source compound for aluminum and aluminum nitride.

6. (Original) The method of claim 1, wherein aluminum nitride is not substantially present in said sintered body of yttrium-aluminum garnet.

7. (Original) The method of claim 1, wherein said sintered body of yttrium-aluminum garnet comprises AlON phase.

8. (Previously Presented) The method of claim 1, wherein the step of sintering is under a reducing atmosphere containing nitrogen in a ratio of 10 percent or higher and 60 percent or lower.

9. (Previously Presented) The method of claim 1, wherein the step of sintering is under an atmosphere having a dew point of -10°C or higher and +10°C or lower.

10. (Previously Presented) The method of claim 1, further comprising the steps of:

forming a shaped body comprising said source compound for yttrium, said source compound of aluminum and aluminum nitride, and dewaxing the shaped body at a temperature of 800°C to 1300°C to obtain a dewaxed body; and

sintering said dewaxed body to obtain the sintered body.

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Previously Presented) A method comprising:

mixing a source compound for yttrium and a source compound for aluminum to produce a mixture;

calcining the mixture to generate yttrium-aluminum garnet;

introducing aluminum nitride to the yttrium-aluminum garnet; and

sintering the mixture of the aluminum nitride and yttrium-aluminum garnet to produce a sintered body of yttrium-aluminum garnet.

16. (Previously Presented) The method of claim 15, wherein said source compound for yttrium comprises yttria and said source compound for aluminum comprises alumina.

17. (Previously Presented) The method of claim 15, wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.59 to 0.62 contained in said source compound for yttrium and said source compound for aluminum.

18. (Previously Presented) The method of claim 15, wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.59 to 0.62 contained in said source compound for yttrium, said source compound for aluminum and aluminum nitride.

19. (Previously Presented) The method of claim 15, wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.61 to 0.63 contained in said source compound for yttrium and said source compound for aluminum, and wherein a molar ratio (Y/Al) of yttrium to aluminum is 0.59 to 0.62 contained in said source compound for yttrium, said source compound for aluminum and aluminum nitride.

20. (Previously Presented) The method of claim 15, wherein aluminum nitride is not substantially present in said sintered body of yttrium-aluminum garnet.

21. (Previously Presented) The method of claim 15, wherein said sintered body of yttrium-aluminum garnet comprises AlON phase.

22. (Previously Presented) The method of claim 15, wherein the step of sintering is under a reducing atmosphere containing nitrogen in a ratio of 10 percent or higher and 60 percent or lower.

23. (Previously Presented) The method of claim 15, wherein the step of sintering is under an atmosphere having a dew point of -10°C or higher and +10°C or lower.

24. (Previously Presented) The method of claim 15, further comprising the steps of:

forming a shaped body comprising said mixture of aluminum nitride and yttrium-aluminum garnet, and dewaxing the shaped body before the sintering.